When Three Charms but Four Alarms: Identifying the Optimal Number of Claims in Persuasion Settings

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Abstract

How many positive claims should be used to produce the most positive impression of a product or service? This article posits that in settings where consumers know that the message source has a persuasion motive, the optimal number of positive claims is three. More claims are better until the fourth claim, at which time consumers' persuasion knowledge causes them to see all the claims with skepticism. The studies in this paper establish and explore this pattern, which is referred to as the *charm of three*. An initial experiment finds that impressions peak at three claims for sources with persuasion motives but not for sources without a persuasion motive. Experiment 2 finds that this occurs for attitudes and impressions, and that increases in skepticism after three claims explain the effect. Two final experiments examine the process by investigating how cognitive load and sequential claims impact the effect.

Keywords: behavioral decision making, impression formation, perception, set size effect

After 100 years of research on what makes a message persuasive (Scott 1908), much is known about how to deliver a message so it will succeed. For example, messages from credible sources are generally more persuasive (Tybout 1978), as are messages presented in a way that facilitates connection to the audience (Cialdini 1997). We also know that persuasiveness of a message is influenced by contextual elements such as price signals (Inman, McAlister, and Hoyer 1990, Anderson and Simester 2003), message framing (Block and Keller 1995, Howard, Kerin, and Shu 2004), and message sequencing (Carlson, Meloy, and Russo 2006). And we know about how different environments can influence the extent to which the receiver focuses on the central message or the peripheral context surrounding it (Chaiken 1980; Petty and Cacioppo 1986). In short, we know a good deal about how to deliver a message so that it packs a persuasive punch.

We also know some things about what message content makes a message more persuasive. For example, messages that have content that is easier to process tend to be more persuasive (Reber, Schwarz, and Winkielmann 2004), as are messages that are consistent with existing and emerging beliefs (Carlson and Russo 2001). We also know that two-sided messages (i.e., those that reveal a negative claim together with positive claims) tend to be more effective if the audience would naturally infer the negative side of the message, as is the case when consumers believe higher prices come with higher quality (Pechmann 1992).

Oddly, however, we do not know how many positive claims should be included in a message when the message receiver is aware the message is intended to persuade. The answer to this question is highly relevant for marketers because consumers are generally aware of the persuasive intent of marketing communications and because firms tend to believe their product provides the most compelling value proposition for consumers in their target market. As such,

there is tendency to want to present as many compelling claims as exist. However, there is a danger that at some level of claims consumer awareness of persuasive intent will convert into skepticism, causing the consumer to discount all the claims.

Said differently, there are two open questions about how number of positive claims in a message will influence its persuasiveness: Is there a point at which an extra claim undermines the persuasiveness of a message? And if so, where is this threshold after which additional positive claims undermine the persuasiveness of the entire message?

To answer these questions, this article examines the relationship between the number of positive claims about an object and the impression made by those claims. Building from theories of both inference sufficiency and persuasion knowledge, we argue that once enough information is seen to draw an inference, additional claims will cause consumers who are aware the message source has a persuasion motive to become skeptical of the entire message. In the context of positive message claims, this means that more claims will improve the persuasiveness of the message up to a point, but beyond that point, additional claims will trigger coping and skepticism if the message source is believed to have a persuasion motive. This skepticism will cause the entire set of claims to be seen as less effective than a smaller set of claims.

For those seeking an optimal message design, the critical question is: Where is the tipping point at which additional claims undermine the effectiveness of all the claims? We propose that in settings where consumers know the source has a persuasion motive this tipping point will be the fourth claim. Specifically, based on work showing that people can draw inference about an object after seeing three data points, we propose that consumers will see three positive claims as sufficient to draw an inference about a product or service. Since three claims is sufficient for this inference, additional claims will trigger skepticism and message coping

processes that will undermine the entire message. In practical terms, this means that three positive claims will produce the most positive impression, and four positive claims will produce an impression that is less positive than the impression created by a three claim message.

The remainder of this article is as follows. The next section reviews relevant literature and establishes our research hypothesis. We then present four experiments. The first two establish three positive claims as optimal for message effectiveness, and the last two focus on the process by which we expect this occurs. The article concludes with a discussion of implications and future research.

Theoretical Development

Number of Claims and Message Persuasiveness

Prior research has examined how the structure of a message can influence its persuasiveness. One longstanding finding of this research is that adding additional positive claims often increases the overall persuasiveness of a message. For example, Stewart (1965) gave participants a sequence of traits about a person, which they reacted to by rating their impression of the person after each trait. In one condition in which participants saw four positive traits before four negative traits, Stewart found that impression of the individual increased monotonically with each additional positive trait. These findings and findings like them (e.g., Anderson 1959; Willis 1960) led to the widely accepted conclusion that adding a new average strength positive claim or argument about a target will increase the impression of that target object, an empirical regularity that Anderson (1967) referred to as the set size effect.

But the relationship between number of claims and impression may not be so straightforward when the situation involves consumers' perceptions of claims made by marketers. To see why, it is important to understand that marketing claims are often received by consumers who believe that a vested party generated the message in which the claims were embedded. This knowledge of persuasive intent has been referred to as persuasion knowledge (Friestad and Wright 1994, 1995), marketplace metacognition (Brown and Krishna 2004), expectations of manipulative intent (Hovland, Janis, and Kelley 1953), perceived dramatism (Deighton 1992), and skepticism (Hardesty, Carlson, and Bearden 2002).

Friestad and Wright's (1994) persuasion knowledge model is important because it changes the focus from message design to message receiver and by doing so introduces the idea that the message that matters is the one that is received, not the one that is sent. It is this unique focus on the receiver and the receiver's message coping process that makes the persuasion knowledge model so useful for understanding what makes a marketing message effective. The model proposes that the persuasiveness of a message depends on the beliefs held by the target consumer (Friestad and Wright 1994). Specifically, the target holds certain beliefs about the types of tactics marketers use and how the typical consumer responds to such tactics. They also possess beliefs about what tactics are appropriate in which circumstances. A tactic "takes on meaning… if they see a possible causal connection between it and a psychological mediator" (Friestad and Wright 1994, p.4). When a consumer identifies a persuasion tactic and determines its inappropriateness for the situation, coping begins. Coping may take the form of disengagement, ignoring the tactic, attempting a more balanced elaboration of the message, or simply discounting the message.

To explicitly test whether large numbers of claims are seen as a persuasion tactic by consumers, we ran a small pilot study on 42 individuals taken from the same population as the other studies in this paper. Participants were asked to indicate their agreement with different statements relating to why companies list reasons to buy a product (1 = strongly disagree, 7 = strongly agree). Participants more strongly agreed with the statement "Companies list reasons to buy as a way to influence or persuade their target customers" (M = 6.12) than they did with the statement “Companies list reasons to buy as a way of informing their customers about their product” (M = 4.88, paired comparison $t(41) = 5.55$, $p < .001$). Likewise, they agreed with “Listing more reasons to buy is more persuasive than having only a few reasons to buy”(M = 5.64) more than they did with “Listing more reasons to buy is more informative than having only a few reasons to buy” (M = 4.95, paired comparison $t(41) = 3.4$, $p < .001$). These results suggest that lists of claims by marketers are a highly accessible persuasion motive for many consumers, a key piece of the persuasion knowledge model.

Per the persuasion knowledge model, consumers who believe a message was designed to persuade them often employ strategies to cope with the message (Campbell and Kirmani 2008). Coping strategies include altering one’s interpretation of the elements that make up the message (e.g., Barone, Manning and Miniard 2004; Brown and Krishna 2004; Forehand and Grier 2003). For example, Brown and Krishna (2004) found that consumers who believed that high-cost product defaults were set to influence their choices counter-argued against the default. It is precisely this type of coping that helps explain why small changes in message design can have profound effects on message effectiveness (Mitchell 1986; Unnava and Burnkrant 1991; Shabbir and Thwaites 2007; Cline and Kellaris 2007; Krishnan and Chakravarti 2003; Crowley and Hoyer 1994; Carlson, Meloy, and Russo 2006; Sawyer and Howard 1991). Namely, if a design

change activates or deactivates persuasion knowledge, and/or facilitates or impedes coping activities, then message persuasiveness may be impacted.

If coping depends on the number of claims encountered, the relationship between number of claims and message persuasiveness may follow an inverted-U shape. For example, while initial exposures to an ad generally increase its effectiveness, too many exposures can cause coping to occur, making the ad less persuasive (Kirmani 1997). For repetition, this threshold generally lies between one and five repetitions. For example, Cacioppo and Petty (1979) repeatedly found that three exposures to a message was more effective than either one exposure or five exposures in terms of generating message agreement and favorable thoughts. They speculated that up to three exposures allowed for elaboration that was mainly positive, but that five exposures crossed the tedium threshold, causing coping in the form of counterargumentation. Central to their claim is that expanding the message, either through adding claims or by increasing repetition, allows for greater message elaboration (Petty and Cacioppo, 1977), which can improve message effectiveness in the absence of coping, but undermine message effectiveness when coping is active. While we focus on claims that are different in content rather than an identical repeated message, we expect that the overall elaboration and coping process is essentially the same.

Three Claims as the Peak of Sufficiency

In settings where persuasion knowledge is active, we expect the relationship between number of positive claims and impression of the object will follow an inverted-U type of shape, with additional claims improving impression of the object up to a point and undermining impression of the object thereafter. We believe that this occurs because consumers who are

aware that the message source has a persuasion motive will tend to be skeptical of all the claims once the number of claims becomes large enough to trigger coping. Put differently, once the point of sufficiency is passed, consumers will employ coping against all claims, thereby undermining not just the most recent claim but the entire message. This begs the question of whether a relatively stable point of sufficiency exists in situations where the message source has a persuasion motive.

To form a hypothesis about where this peak might be, we begin by acknowledging that three is an important number for perceived completion. For example, the average consumer and the average industrial buyer typically believe that a set of three options constitutes a complete consideration set (Uslay, Altintig, and Winsor 2010, Howard and Sheth 1969; Sheth and Sisodia 2002). Similarly, after three observations people are comfortable drawing an inference about an object. This idea, which is captured by the Latin proverb *omne trium est perfectum* (every set of three is complete), can be seen in some of the most important standards in our society. Writing for the majority, Justice O'Connor noted that three strikes laws are constitutional because they are based on the idea that after three felony convictions, the court can infer that an offender is a career criminal (Ewing v. California 2003). This principle also operates when it comes to people's ability to define new terms based on usage instances. For example, people can infer the meaning of a new word after seeing it used in three different examples, (Tenenbaum and Xu 2000), a result consistent with work by Kareev (1995, 2000) on humans' tendency to pick up patterns in small samples, and consistent with the idea of triangulating on a concept.

Research has also revealed the importance of three as sufficient for inferring the nature of a perceived sequence of events. For coin flips, likelihood predictions for a repeated next flip decrease and then increase as streak length increases, with the third event being the transition

point (Altmann and Burns 2005). Likewise, Carlson and Shu (2007) found that people reached their maximal willingness to infer that a sequence of events was a streak after witnessing a third event, be it the third time a coin landed on heads, the third basketball shot made, or the third day a stock closed up. Even though a fourth event might have been expected to increase the subjective belief that a streak was occurring, it did not. It was as if the true nature of the sequence could be ascertained from the first three events alone.

Even among the previously mentioned set size literature, which found that impressions about a target person increased as new positive traits were provided, the marginal increase in impression decreases as the set size expands past three. Anderson (1967) suggests that there is a law of diminishing returns "based on redundancy considerations" which explains the nonlinear shape of the impression curve. Thus, while a larger number of claims can improve impressions in non-persuasion settings, additional impressions beyond three seem to carry less information.

We reasoned that if most people believe they can form a complete impression of an object upon learning three things about it, then three positive claims about an object should be seen as sufficient by most consumers to draw an inference about the object. As in our pilot survey, having some claims can be seen as informative but a large number of claims is easily perceived as a persuasion tactic. Consistent with the persuasion knowledge model, once a target perceives that a message that might otherwise have been seen as informative is actually a persuasion tactic, the meaning of the message is switched (what Friestad and Wright call the "change of meaning" principle) and coping begins. We propose that this boundary between informative claims and a persuasion tactic is at three claims. Therefore, we expect to find that three claims will produce the most positive impression, and that more claims will undermine the impression of the object.

Research Overview

The studies below explore these ideas as follows. The first experiment looks for evidence that three positive claims is optimal when the message source has a persuasion motive, but not when the source is neutral; for a neutral source without persuasion motivation, the set size effect will hold and object impression will increase with larger number of claims. Experiment 2 extends the test of three as the optimal number of claims and also tests the proposed process by looking at skepticism as a mediator. Specifically, when the number of positive claims is varied from one to six for a variety of social and marketplace interactions, we find that the impression of the object is most positive for those who see three claims and that skepticism increases steadily for claims beyond three. The final two experiments focus on the cognitive process that we suggest underlies the charm of three. Experiment 3 tests whether the effect still occurs when high cognitive load impedes persuasion knowledge, as would be predicted by the Persuasion Knowledge Model (Campbell and Kirmani 2000), while Experiment 4 examines how attitude, confidence, and skepticism are affected by a sequentially added claim.

Experiment 1

In this experiment, we examine the relationship between number of positive claims and impression of a product (cereal) and a person (a friend's date). In addition to examining this direct effect, we examine if the effect is moderated by whether the message source has a persuasion motive. We expect that individuals who encounter information from a source that has no persuasion motive will not have their persuasion knowledge activated, and therefore

impression will increase monotonically with the number of positive claims. In contrast, persuasion knowledge should be active when the message source has a persuasion motive. In this condition, we expect that more than three claims will be seen as too many, causing coping, and resulting in a less positive impression for four positive claims than for three positive claims. The two different objects used in Experiment 1, cereal and date, were chosen to provide generalizability by using both a traditional marketing context (cereal as object) and a context that matches the original set size research (person as object). If three claims is optimal for the date when there is a persuasion motive active, we can conclude it is the persuasion motive and not the use of a person as the object that distinguishes our findings from the set size literature.

Methods

We use a two (impression object: cereal versus friend's date) by two (source: persuasion versus non-persuasion) by three (number of positive claims about the object: two, three, or four) design. All factors were manipulated between-participants. The four claims used for each object were selected from a larger set of eight claims. The selection criterion was that the four claims were equally important to a set of pretest participants drawn from the same population as the sample for the main study. The claims appeared in the last sentence of the passage and the combination of claims for the two-claim and three-claim conditions was counterbalanced so that every possible combination appeared equally often. Since the claims are all equally important, we expect to find that number of claims has a monotonically increasing effect on impression in the non-persuasion scenarios. In other words, we expect to replicate previous set size research when the message source does not have a persuasion motive. However, for the persuasion motive scenarios, we expect that the presence of a source with persuasion motive will trigger persuasion

knowledge, which will undermine impression when the perceived number of claims becomes large; in other words, the set size effect will not replicate in persuasion settings.

The descriptions of the objects in each scenario came from either a source who was trying to convince the listener about the claims or from a source who was relating facts about the target object. For example, the four-claim persuasion condition in the cereal domain read:

> "Imagine that you are shopping at the grocery store and you notice that a brand of cereal you sometimes buy has a new package design. As you look closer you discover that they have also changed the product itself. The packaging says that it now is 'Healthier, better tasting, crunchier, and with higher quality ingredients.'"

In contrast, the four-claim non-persuasion cereal condition was:

> "Imagine that you read a Consumer Reports article about a brand of cereal you sometimes buy. The article says that the brand of cereal has been changed and that it now is 'Healthier, better tasting, crunchier, and with higher quality ingredients.'"

The date domain used a similar structure: in the persuasion condition, an old friend is attempting to convince the listener of the wisdom of her decision to get back together with an old boyfriend (usually a dubious move), while in the non-persuasion condition, she is simply describing her new date. Thus, the message source has a motive to convince the listener of the claims in both of the persuasion scenarios, either for the goal of convincing a consumer to try a cereal or for justifying going back to an old boyfriend. We expect that perceivers in these conditions will conclude that the manufacturer or the friend has a motive to describe the target as better than it is. For the non-persuasion cereal scenario, however, the source is a dispassionate third party (Consumer Reports), and for the non-persuasion date scenario, the boyfriend is not an old flame so there is less need for her to convince her friends of his worthiness.

A separate manipulation check study examined the effectiveness of the persuasion manipulations in each of our two domains. Thirty-eight individuals from the same subject population were given one friend scenario and one cereal scenario (order and content counterbalanced), of which half were a persuasion scenario and half were a non-persuasion scenario. After reading each scenario, participants were asked to circle the number that best indicated the extent to which different motives represented the company or friend's primary goal (1 = completely disagree; 7 = completely agree). Subjects in the persuasion condition were significantly more likely to infer that the cereal company's motive was "to make a sale" (M = 6.21) than to infer that the motive was "inform you about the product" (M = 4.53; paired comparison $t(18) = 3.95$, $p < .001$) or "to build a good relationship with you" (M = 4.11; paired comparison $t(18) = 4.20$, $p < .001$). In contrast, those in the non-persuasion condition were significantly more likely to agree that the motive was information (M = 6.05) than sales (M = 4.05; paired comparison $t(18) = 4.42$, $p < .001$), suggesting that persuasion was not seen as the company's primary motive. Similar results are found in the friend domain: in the persuasion condition, subjects inferred that the friend's motive was to "convince you that John is worth dating" (M = 5.89) rather than to "tell you what John is like as a person" (M = 5.11, paired comparison $t(18) = 2.33$, $p = .02$). In contrast, those in the non-persuasion condition agreed that their friend's motive was to inform (M = 5.74) rather than to convince (M = 4.84; paired comparison $t(18) = 1.90$, $p = .04$). These results verified that making a sale or convincing the listener was the most highly accessible motive for the persuasion scenarios, consistent with our manipulations.

Scenarios were given to 521 student participants at a large Western university as part of a packet of unrelated studies for which they were paid for their participation; scenarios are

provided in the Appendix. After reading each scenario, participants reported their agreement with a single impression. In the cereal domain this statement was, "The cereal seems greatly improved," and in the friend's date domain the statement was, "John seems like a really great guy." Responses were collected using a 7-point Likert scale.

Results

An ANOVA with domain, number of claims, source type, and an interaction of number of claims and source type yielded no effect of domain ($F(1,514) = .22$, $p > .60$). However, the model did reveal significant main effects for number of claims ($F(2,514) = 6.39$, $p < .005$) and persuasion motive ($F(1,514) = 19.08$, $p < .001$) as well as a significant interaction effect ($F(2, 514) = 3.61$, $p < .05$). We next analyzed the responses of the participants separately for the two types of sources. When the source had a persuasion motive, we found a main effect of number of claims ($F(2, 296) = 4.13$, $p = .017$) and planned contrast t-tests revealed that the impression of the object was more positive under three claims ($M = 4.37$) than under two claims ($M = 3.95$; $t(221) = 2.49$, $p = .014$) or four claims ($M = 3.96$; $t(223) = 2.25$, $p = .025$; see Figure 1).

Insert Figure 1 about here

In contrast, the responses of participants for a source without a persuasion motive did not show an optimal impression at three claims; consistent with the set size effect, there was a nearly linear increase in impression with more positive claims ($F(2, 219) = 6.02$, $p = .003$). Comparison tests reveal that the impression of the object was more positive under three ($M = 4.69$) claims than under two claims ($M = 4.19$, $t(160) = 2.67$, $p = .008$), but three claims was not more positive than four claims ($M = 4.90$, $t(166) = 1.17$, $p = .224$), consistent with the law of diminishing returns in set size effect documented by Anderson (1967).

Discussion

This experiment found a set size effect when the message source lacked a persuasion motive. In these situations, an increasing number of positive claims had a relatively linear positive effect on impression of the target object. In contrast, when the source had a persuasion motive, there was a nonlinear effect of claims on impression, with three claims resulting in the most positive impression, followed by a less positive impression for more or less claims.

Our theory suggests that once the sufficiency of three claims is breached the full set of claims is seen with skepticism, regardless of how many claims are presented. Thus, the impression of the object should not increase or decrease much with additional claims as each additional claim will be discounted to the same extent as all the other claims. However, another possibility is that the skepticism about the unreasonableness of the claims will increase with each additional claim after the third claim. This would produce a "more is less" pattern in which each claim added after the fourth incrementally undermines the overall impression of the object. A final possibility is that there is just something unsettling about the fourth claim. If so, this should produce a pattern where impressions dip at the fourth claim but then improve with each claim thereafter. The next experiment examines this issue by extending the exploration to a larger number of claims across a wider variety of domains, while also testing an additional dependent variable (overall attitude toward the object), expanding the impression measure beyond a single item, and exploring skepticism as a mediator of the charm of three.

Experiment 2

In this experiment we replicate Experiment 1 by exploring impression on dimensions related to the claims and we expand the investigation by examining a slightly more distal

dependent variable, attitude toward the object. Based on our primary interest in uses of persuasion knowledge, Experiment 2 focuses only on persuasion scenarios. We also examine the process by which claims influence impressions by examining whether skepticism of the claims mediates the effect of number of claims on impression. Finally, we extend the number of claims to determine what happens to impressions when the number of positive claims exceeds four.

Methods

This experiment used a five (target object: cereal, restaurant, shampoo, ice cream store, politician) by six (number of claims: one, two, three, four, five, or six) design, with target object as a within-participant factor and number of arguments a between-participant factor. The domains were selected to examine if the charm of three occurs in settings as varied as package claims, advertising, and social persuasion.

Each participant read the description of the current target object. For example, the shampoo domain was introduced as follows:

> "Imagine that you are reading one of your favorite magazines and an ad for a new brand of shampoo catches your attention. You decide to read the ad carefully to see if it is worth switching to this new product. The ad says that this new shampoo does the following: ____"

The blank was filled with one, two, three, four, five or six positive adjectives to operationalize the number of claim conditions. Materials for all five domains are included in the Appendix.

The claim sets for each domain were designed and pretested to have equally important claims in them. As in Experiment 1, the claims appeared in the last sentence of the passage and the claim sets for each condition were counterbalanced so that multiple different claim

combinations were used in each condition. We found no effect of different claim combinations on our dependent variables so we do not discuss this further.

Participants were 296 undergraduate students who were paid for completing this study as part of a larger packet of unrelated studies. Each participant read the full description of the target object, which included the claims, and rated the object on three 7-point attitude measures (good/bad, favorable/unfavorable, and positive/negative). Participants then indicated their agreement with two impression statements and then two skepticism statements on 7-point Likert scales (1 = Strongly Disagree; 7 = Strongly Agree). These four statements differed slightly across target objects to ensure statement relevance for each object. The first two statements measured impression of the object, and the third and fourth statements measured skepticism toward the claims. For example, for the shampoo domain described above, the statements were:

1) The new shampoo seems like a better product than current options.

2) This shampoo seems worth trying.

3) The shampoo can't possibly be as great as the company makes it out to be.

4) The claims are just a ploy to get me to buy the shampoo.

Results

We began by averaging responses to the three attitude questions ($\alpha = .93$), the two impression questions ($\alpha = .84$), and the two skepticism questions ($\alpha = .75$) to form composite scores for these three constructs.[1] To determine whether the number of claims affects each measure, we ran a series of regressions with attitude, impression, or skepticism as the dependent variable and number of claims as the independent variable, along with dummy variables to control for differences between the five target objects. Since we predicted that relationship

[1] A series of confirmatory factor analyses of all six questions supports treating these measures as three separate and independent constructs.

between attitude and claims as well as the relationship between impression and claims would be nonlinear, with a peak at three, we also included a dummy variable for three claims, which we expected would be significant and positive.

For attitude, an increasing number of claims had only a marginally significant positive effect (ß = .04, t = 1.87, p = .06), but as expected, there was a significant positive effect for three claims (ß = .36, t = 3.95, p < .001), representing a peak attitude at this point. Dummies for target object were non-significant, with the exception of lower overall attitude towards the politician (ß = -.64, t = -5.93, p < .001) and higher overall attitude toward the ice cream store (ß = .23, t = 2.17, p = .03). There were no significant interactions between number of claims and target object. Given that the overall pattern was consistent across all five target objects, the results were combined and a series of planned contrast t-tests were run to determine whether attitude was significantly higher for three claims than for all other numbers of claims; results show that three was significantly different from each of one, two, four, five, and six claims, but that four, five, and six claims were not significantly different from each other. Means and standard errors for attitude, impression, and skepticism at each level of claims are shown in Table 1 and graphed in Figure 2.

Insert Table 1 and Figure 2 about here

The pattern of results was similar for the impression measure. A regression with all independent variables included showed a significant positive effect for number of claims (ß = .08, t = 4.10, p < .001) and an even larger positive effect for three claims specifically (ß = .55, t = 6.14, p < .001). Again, overall impression was lower for the politician (ß = -1.07, t = -10.15, p < .001), and also for shampoo and cereal ($ß_{shampoo}$ = -.68, t=6.45, p<.001, $ß_{cereal}$ = -.37, t=3.50,

p<.001) relative to the other target objects. A series of planned contrast t-tests showed that the impression for three claims was significantly higher than for one, two, four, five, or six claims.

The skepticism measure displayed a main effect similar to the attitude and impression measures but with some important differences in the pattern. Regression with the same independent variables showed a positive main effect on skepticism as number of claims increased (ß = .14, t = 4.10, p < .001), but with a significant negative effect for three claims (ß = -.21, t = 2.15, p = .03), suggesting that the positive main effect is primarily driven by claims larger than three. Relative to the other target objects, skepticism was significantly lower for the ice cream parlor (ß = -.38, t = 3.35, p = .001). A series of planned contrast t-tests found that skepticism for three claims was not significantly higher than for one or two claims, but that skepticism for three claims was significantly lower than four, five, or six claims, consistent with four claims triggering skepticism (p < .003 for all tests). Additional tests show that five was not significantly different from four or six, but four and six were significantly different from each other (p = .02), suggesting that skepticism increases slightly as the number of claims increases.

We suggested that skepticism may operate as a mediator for attitude and impression toward the objects; as the number of claims increases past three, increasing skepticism among consumers causes them to reduce their impression of and their general attitude toward the object. To see whether skepticism can explain the decrease in attitude and impression when moving from three to larger numbers of claims, we ran a Preacher-Hayes bootstrap test on data from the three through six claims conditions to test for mediation (Preacher and Hayes 2004, Zhao, Lynch and Chen 2010)[2]. We start with the attitude measure. We found that the mean indirect effect from the bootstrap analysis is negative and significant (-.056, 95% C.I. of -.084 to -.030). In the

[2] We use data from three or more claims in this analysis because our theory is that skepticism is not triggered for less than three claims; therefore, the relationship between number of claims and attitude or impression is direct (i.e., not mediated) for less than three claims and that portion of the data is not relevant for this analysis.

indirect path, an increase of a single claim for claims of three or more increases skepticism (a = .204, p < .001) but an increase in skepticism reduces attitude (b = -.276, p < .001) when holding constant number of claims. The direct effect is not significant (c = -.044, p = .23), indicating indirect-only mediation. The results for impression are similar: the mean indirect effect is again negative and significant (-.069, 95% C.I. of -.095 to -.038). The indirect paths are each significant, and the direct effect is not (c = -.054, p = .14), again suggesting full indirect-only mediation.

Discussion

This experiment found that three claims is optimal both for the general impression and attitude of targets as diverse as shampoo, cereal, politicians, and restaurants. Specifically, we found that impression of the objects on dimensions related to the claims peaked at three claims, and then decreased. This pattern was also found for general attitudes toward the objects, indicating that the charm of three extends to more distal and general impressions of the objects. Meanwhile, a measure of skepticism collected after the attitude and impression measures showed a significant positive increase with number of claims but only for four or more claims. A mediation analysis revealed that these changes in skepticism for claims above three fully mediated the decreases in both attitude and impression, suggesting that four or more claims caused our participants to infer motives about the message source, perhaps by using their persuasion knowledge.

To more directly explore the proposed role of persuasion knowledge, we ran a follow-up experiment in which a separate group of participants (n = 56) reacted to three or four positive cereal claims and then wrote the thoughts they had when they were reading about the cereal. Following Campbell and Kirmani (2000), an independent coder who was blind to condition

coded each statement according to the type of thoughts it expressed. The mutually exclusive coding categories were: positive thoughts about the claim (positive elaboration), negative thoughts about the claim (negative elaboration), identification of the claim as a sales tactic (discounting), not believing the claim (counterarguing), seeing the claim as contradictory to other claims (counterarguing), indifference about the claim, and "other." Discounting and counterarguing have both been previously identified as coping techniques in persuasion knowledge environments (Campbell and Kirmani 2000; Brown and Krishna 2004; Cacioppo and Petty 1979).

Analysis of coping thoughts combined into a single measure of skepticism revealed that skeptical thoughts were more common in the four claim condition (51.9%) than in the three claim condition (24.1%; $\chi^2 = 4.58$, $p = .032$). This difference was offset by a greater incidence of positive elaboration thoughts in the three claim condition (58.6%) than in the four claim condition (25.9%; $\chi^2 = 6.103$, $p < .01$). We then ran an ANOVA on attitude toward the cereal as a function of suspicion, the number of claims (three versus four), and an interaction term. The ANOVA revealed a significant interaction ($F(1, 52) = 4.03$, $p = .05$). The means underlying these results are displayed in Figure 3. The interaction suggests that the charm of three is driven by those who reported being skeptical of the description of the cereal. There was an effect of number of arguments on attitude toward the cereal among participants who had suspicion thoughts ($t(19) = 1.90$, $p = .07$), but no such effect for those who did not have suspicious thoughts ($t(33) = -.76$, $p = .415$). These results suggest that non-skeptical respondents do not significantly change their attitude when exposed to three versus four arguments, but skeptical respondents, who are actively using their persuasion knowledge, generate a more negative

response to the product when exposed to four rather than three arguments, consistent with our proposed effect.

Insert Figure 3 about here

The next experiment further examines the role of persuasion knowledge in the charm of three by testing whether a manipulation that has previously been shown to weaken persuasion knowledge coping undermines the effect. Specifically, Campbell and Kirmani (2000) found that coping activities dropped substantially when consumers were cognitively constrained. If participants in the four or more claims conditions above drew inferences about the validity of the claims, they must have been using cognitive resources to do so. Thus, the non-monotonic relationship between number of claims and impressions should revert to a monotonic one when individuals are under cognitive load. The next study explores this issue.

Experiment 3

If persuasion knowledge and the inference it endows is indeed at the heart of the charm of three, then cognitive load should moderate the effect. Specifically, participants under cognitive load should be less able to apply coping strategies, which should reduce and possibly even reverse the effect. The current experiment tests this idea.

Methods

We used the three argument and four argument cereal conditions from Experiments 1 and 2, crossed with a cognitive load manipulation. The dependent variable was impression of the cereal, measured by agreement (7-point Likert scale) with the impression statement used in Experiment 1. Following Shiv and Fedorkin (1999), participants in the low cognitive load

condition were required to remember a two-digit number, while those in the high load condition were required to remember a seven-digit number. Thus, the experiment consisted of four cells that resulted from crossing number of positive claims (three versus four) with cognitive load (low versus high). Participants were 128 undergraduate students from a large west coast university who were financially compensated for completing this study.

Results

We analyzed impression toward the cereal using an ANOVA with main effects for number of arguments, cognitive load, and the interaction term. The model revealed a significant interaction ($F(1, 124) = 10.73$, $p < .001$) depicted in Figure 4. Decomposition of this interaction revealed that the rule of three occurred under low load ($t(57) = 3.05$, $p < .01$), but not under high cognitive load. In fact, those under high load who read four positive claims had a slightly more positive (though not statistically significant) impression toward the cereal ($M = 4.58$) than those who received three positive claims ($M = 4.31$; $t(67) = 1.32$, $p = .19$).

Insert Figure 4 about here.

Discussion

This experiment found that three claims is better than four when participants encounter the claims under low cognitive load, which may represent many everyday choice settings where consumers are actively thinking about their purchase decisions. However, this did not occur when participants were under high cognitive load. This is consistent with the idea that resources are required for consumers to implement coping strategies (Campbell and Kirmani 2000).

While Experiment 3 lends credence to the argument that persuasion knowledge is a crucial element of what causes consumers to become skeptical of claims beyond three, we may still wonder about what is happening in the mind of the consumer as the marketer moves from

three claims to four. To examine how attitudes, impression, and confidence change as additional claims are added, Experiment 4 measures these variables twice: once with an initial set of claims, and then again after a single additional claim has been provided. By testing the impact of a sequentially added claim on impression we hope to better understand how overall impression changes as the number of claims moves beyond three.

Experiment 4

This experiment measures attitude with an initial set of claims and then measures attitude again after adding an additional claim in the hopes of generating more insight into how attitudes are changing as new claims are added. This approach also has the advantage of being able to analyze differences in attitude from number of claims at the level of the individual (i.e., within-subject) rather than comparing aggregate attitudes between groups, as was the case in the experiments above. In addition to measuring attitude, we collect measures of confidence to see whether additional claims increase confidence or undermine confidence. As with Experiment 2, we measure skepticism to see whether it increases after three claims. To understand the perceived tradeoff in the marginal benefit of an additional claim versus its marginal cost, we include questions to understand whether participants find the additional claim helpful, believable, or worth adding. Finally, we include open-ended responses, as in the follow-up to Experiment 2, to see what types of thoughts dominate participants' reactions to additional claims.

Methods

We used the cereal scenario from above with either one, two, three, or four claims (combinations of claims were counterbalanced within each condition). Participants were 365 undergraduate students who were paid for completing this study as part of a larger packet of

unrelated studies. Participants were asked about their attitude toward the cereal using the three-item scale as in previous studies (good/bad, favorable/unfavorable, and positive/negative). They were also asked how confident they were about their attitude toward the cereal.

Participants were then told that the manufacturer had decided to add one additional claim to the list, resulting in a total of either two, three, four, or five claims. Participants were asked to again indicate their attitude toward the cereal and their confidence, taking into account the new claim. After recording their attitude and confidence, they were asked whether they thought the new claim was helpful and useful. They then completed two open-ended responses about their reaction to the new claim and why they thought the manufacturer had added the claim; these responses were categorized by a coder blind to the hypothesis for evidence of suspicion thoughts as was done in the follow-up study to Experiment 2. Finally, participants reported their agreement on a 7-point scale (1=Strongly Disagree; 7=Strongly Agree) with five statements, the first two of which related to the benefits of adding the new claim ("The additional claim is entirely believable." "It is worth it for the manufacturer to provide this additional claim.") and three questions on skepticism ("The additional claim is making me skeptical." "The cereal can't possibly be as great as the company makes it out to be." "The improvement claims are just a ploy to get me to buy.").

Results

We begin by analyzing the attitude and confidence measures for the initial sets of one, two, three, or four claims.[3] Consistent with earlier findings, attitude peaked at three claims. Specifically, attitude for two claims (M = 4.99) was significantly greater than for one claim (M =

[3] Factor analysis supports separating the attitude, confidence, helpful, worthwhile, and skepticism measures into separate constructs. For the remainder of the analysis, composite scores are used based on averaging the three attitude questions (α = .97), the two helpful questions (α = .94), and the three skepticism questions (α = .72). The confidence and worthwhile variables are each a single question measure.

4.58, $t(178) = 2.43$, $p = .02$) and attitude for three claims ($M = 5.34$) was significantly higher than for two claims ($t(187) = 2.04$, $p = .04$). As expected, attitude after four claims was significantly lower than attitude for three claims ($M = 4.83$, $t(183) = 2.87$, $p = .005$). We also found that participants' confidence about their impression of the product increased in number of claims, although a linear regression revealed that this increase was only marginally significant ($p = .10$). (See Table 2 for all means.)

We next investigate what happens when an additional claim is added to the set. For participants who originally saw one claim and then received a second claim, as well as for those who saw two and then a third claim, attitude significantly increased with the additional claim (from one to two claims: 4.58 to 5.07, $t(87) = 5.52$, $p < .001$; from two to three claims: 4.99 to 5.61, $t(91) = 6.55$, $p < .001$). For individuals who began with three claims, however, adding a fourth claim significantly decreased attitude (5.34 to 4.30, $t(96) = 8.08$, $p < .001$). Moving from four to five claims also had a negative impact on attitude (4.83 to 3.58, $t(87) = 7.44$, $p < .001$). Interestingly, going from two to three claims resulted in a marginally stronger positive attitude than just starting with three claims (5.60 vs. 5.34, $t(187) = 1.58$, $p = .12$), and going from three to four resulted in a worse attitude than just starting with four claims (4.30 vs. 4.83, $t(183) = 2.90$, $p = .004$). One way to think about this result is that increased elaboration (enabled by partitioning the claim set) produces greater positive impressions when coping is not activated and worse impressions when it is. In other words, when three claims were partitioned into two plus one, the greater opportunity for elaboration improved impression. However, when four claims were partitioned into three plus one, the greater opportunity for elaboration gave rise to increased coping, and to a poorer overall impression.

The overall pattern of attitudes after a claim was added continued to show a strong peak at three claims (M = 5.61), which was significantly greater than either two claims (M = 5.07, $t(178) = 3.30$, $p = .001$) or four claims (M = 4.30, $t(187) = 7.71$, $p < .001$). Confidence followed a similar pattern, increasing (although not significantly) for two and three claims (M = 4.78 and M = 4.82, respectively) but significantly decreasing when going from three to four claims (4.76 to 4.02, $t(96) = 4.60$, $p < .001$) and from four to five claims (4.77 to 4.05, $t(87) = 3.55$, $p < .001$). Overall, the relationship between confidence and claims is negative and significant after a new claim is added (ß = -.30, t = -4.95, $p < .001$), suggesting that larger numbers of claims are undermining the overall impression of the product.

The remaining sets of measures provide a closer look at how participants reacted to the added claim. When asked whether the new claim was helpful and/or useful for creating an evaluation of the product, participants who saw either a second or third claim were more likely to agree than those seeing a fourth or fifth claim (e.g., M_3 = 4.33 vs M_4 = 3.60, $t(187) = 2.90$, $p = .004$). Similarly, when asked whether it was "worth it" for the company to add the new claim, participants' agreement drops linearly, with additional claims seen as less beneficial as the number of claims increases (ß = -.30, t = -3.85, $p < .001$). This is consistent with the idea that three claims is sufficient. Consistent with our findings in Experiment 2, skepticism increased significantly as number of claims increased (ß = .40, t = 7.38, $p < .001$).

Finally, the open-ended responses about the new claim provide us with an opportunity to explore the form of coping that individuals employ when faced with more than three claims. As with the Experiment 2 follow-up, and consistent with Campbell and Kirmani (2000), an independent coder blind to our hypothesis coded each response according to the type of thoughts it expressed. The coding categories were the same as those used in Experiment 2 (i.e., positive

elaboration, negative elaboration, discounting, counterarguing, and other). Recall that discounting and counterarguing have both been previously identified as coping techniques in persuasion knowledge environments (Campbell and Kirmani 2000; Brown and Krishna 2004; Cacioppo and Petty 1979).

Overall, an analysis of coping thoughts combined into a single measure of skepticism revealed that skeptical thoughts increased with additional claims (in a regression, skepticism increases with claims: ß = .15, $t = 4.39$, $p < .001$). Looking more specifically at each type of thought, we find that a comparison of messages with a total of three claims to messages with four claims shows a significant decrease in positive elaboration thoughts (44.2% to 15.5%, $\chi^2 = 30.03$, $p < .0001$), a significant increase in negative elaboration thoughts (9.3% to 25.0%, $\chi^2 = 23.35$, $p < .0001$), and a significant increase in counterarguing (3.5% to 25.0%, $\chi^2 = 112$, $p < .0001$; see Figure 5).

Insert Figure 5 about here

Discussion

This experiment replicated the overall finding that attitude for an object presented in a persuasion setting peaks at three claims. This pattern emerged in a situation where an additional claim was sequentially added to an existing set. This allowed us to measure how both attitude and confidence were affected by additional claims. We found that increasing the number of claims from one to two or from two to three had a positive effect on both attitude and confidence, and participants in these scenarios were more likely to agree that the newly added claim was helpful and worthwhile. However, when an additional claim was added to a set of either three or four initial claims, the new claim caused a significant decrease in both attitude and confidence. Participants were significantly less likely to agree that the new claim was worthwhile or helpful,

and their skepticism (measured both directly and with open-ended questions) increased. Furthermore, the open-ended responses indicate that individuals who see a total of three claims or less primarily engage in positive elaboration about the new claim, while those who see four claims or more reported negative elaboration and coping in the form of counterarguing. These findings are consistent with the elaboration and coping findings for repeated exposure to a message reported by Petty and Cacioppo (1979), and provide a deeper explanation for the increase in skepticism that occurs when moving beyond three claims.

General Discussion

Across four experiments, we consistently found that impressions conformed to the "charm of three" in that consumers saw four or more positive claims as less positive than three positive claims. This effect replicated across a variety of domains, including package claims (cereal), individuals (new date), store advertising (restaurant), and political persuasion (politician).

We have suggested that the charm of three stems from an inference due to perceptions that three claims is sufficient to draw a conclusion about an object. The evidence supports this in that skepticism increases when the number of claims moves beyond three and also mediates the effect on attitude (Experiment 2). Support for the use of persuasion knowledge is most evident in Experiment 3, where high cognitive load is shown to moderate the effect. Other interventions should also be capable of interfering with the charm of three. For example, direct consumer experience with the item, so that the claims can be verified by the individual herself, may operate similarly to the non-persuasion motivated source we test in Experiment 1; other efforts to reduce

skepticism, such as by admitting a weakness as part of a two-sided appeal (Kamins and Assael 1987; Settle and Golden 1974; Smith and Hunt 1978), may also dampen the effect.

Since persuasion knowledge depends on knowledge of persuasion tactics, the charm of three may be more likely to govern impressions of those who know a lot about marketing. Research on vulnerable consumers finds that young children are "unusually susceptible" to marketing activities (Morgan, Schuler, and Stoltman 1995). Thus, in an odd twist of fate, children may be less prone to the charm of three effect, and may be more likely to exhibit impressions that are consistent with the set size effect. On the other end of the spectrum older adults might be more likely to exhibit our effect because they tend to have stronger knowledge of manipulative intent and use it to a greater extent than younger adults (Kirmani and Campbell 2004). Since our studies used college students in their late teens and early twenties, the size of the effects we observed might be smaller than would be found with a sample of older adults.

The current research provides important insight for our understanding of consumer perceptions, inferences, and persuasion techniques, as well as our ability to offer advice to marketers on how to improve messaging on packages and in advertisements. We show that single entities, such as people, firms, or products, do better by presenting three claims than they do by presenting four claims. At a tactical level, practicing marketing managers can benefit from this insight when designing advertising claims and promotional materials. However, even more important may be the need to keep the charm of three in mind while developing marketing strategy. It has long been understood that marketers who attempt to claim a large number of benefits as part of their positioning and brand image risk confusing customers (Park, Jaworski, and MacInnis 1986). Indeed, long term brand success often hinges on communicating a clear, consistent image to consumers over time (Gardner and Levy 1955). Our finding that exceeding

three positive claims harms impression provides further support to these arguments by directly showing how more than three positive claims - or, by extension, more than three brand concepts – can lead to consumer skepticism and harm overall brand success.

While we have focused on attributes of single entities like products or individuals, the charm of three may also apply to groups of similar entities. For example, a set of statements from a group of firms belonging to the same industry category could be perceived by observers as strongly related and subject to the effect. Such an instance appears to have occurred in April 2009, when four major United States banks reported first quarter earnings that were surprisingly positive within a week of each other. Investors reacted positively on April 13th when Goldman Sachs was the first to report its earnings. As a result, the average stock price of the four banks closed up by 5.3% over the previous close. On April 16th, when JP Morgan and Citigroup reported positive earnings, investors reacted with additional optimism, and stock prices closed up .4% on that day. However, when Bank of America (the fourth to report) reported positive earnings on April 20th, the average stock price of the four banks closed down 9.2% on that day—10% down over the close on April 12 (the day before any of the banks had reported positive earnings). While many other factors may be influencing stock price, reporters' reactions were consistent with our account of the skepticism that arises from more than three positive claims: they suggested that investors' negative reaction to this sequence of four positive earnings was due to speculation that something was amiss in the industry, writing that "investors spotted the attempts at sleight of hand, and didn't buy it for a second." (Sorkin 2009)

The media's reaction to the banking industry earnings reports suggest that actions taken by any group of entities that are perceived as a single category may be susceptible to the effect. Demographic groups (women, Hispanics, teenagers), organizations (baseball teams, fraternities,

universities), and political entities (states, cities, countries) who produce four positive outcomes may be at risk of being less believed if observers perceive that the claims are "too much" and infer that the group as a whole is trying to persuade them. These results may also extend to a single entity that produces positive outcomes spread over time. Previous research has suggested that four identical, consecutive, probabilistic outcomes are not seen as more informative (specifically, as more of a streak) than three consecutive outcomes (Carlson and Shu 2007); when the outcomes are under the control of the target, our studies suggest that the fourth outcome may actually be detrimental.

The strength of three positive claims in persuasion has been suggested in domains other than those explored above. For example, Atkinson (1984) suggests that speakers often use three-part phrases to persuade the audience to applaud. He calls these three-part phrases "claptraps." Three is also commonly cited as the best structure for humor (e.g., "three men walk into a bar…", Kinde 2009). Resume advisors suggest that three is the optimal number of references to include in a resume; career expert Laura DeCarlo, executive director of Career Directors International, states, "Three is what most companies are looking for. Listing more references than that doesn't necessarily give you a leg up, and listing too many names may overwhelm an employer." (Cowan 2007) And various experts on presentation styles suggest that three is the most efficient number of arguments to make an effective and compelling case (Booker 2005).

We believe that we are the first to provide empirical evidence to support these lay beliefs. In addition to being more efficient, three positive claims are generally more effective at creating a positive impression than are four positive claims when the target audience believes the message source has a persuasion motive. Conditions for which this is not true include when claims are verified by a credible third party and when the consumer is under a heavy cognitive load. We

trace these boundary conditions to situations where consumers are less likely to use their persuasion knowledge to draw inferences of ulterior motives and, therefore, less likely to perceive that the message source is trying too hard.

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Table 1. Means and Standard Errors of Attitude, Impression, and Skepticism per Number of Claims (Experiment 2)

Number of claims	Attitude	Impression	Skepticism
1	4.56 (0.09)	4.23 (0.09)	4.44 (0.09)
2	4.80 (0.09)	4.40 (0.08)	4.42 (0.08)
3	5.11 (0.08)	5.01 (0.09)	4.44 (0.09)
4	4.84 (0.08)	4.62 (0.09)	4.80 (0.09)
5	4.86 (0.09)	4.69 (0.09)	4.94 (0.09)
6	4.77 (0.09)	4.59 (0.08)	5.08 (0.09)

Table 2. Means and Standard Errors of Attitude, Confidence, and Skepticism per Number of Claims (Experiment 4)

	Initial claims		***After one additional claim***				
Number of initial claims	**Attitude**	**Confidence**	**Attitude**	**Confidence**	**Helpful**	**Worth-while**	**Skeptical**
1	4.58 (0.11)	4.48 (0.13)	5.07 (0.11)	4.78 (0.11)	4.46 (0.16)	4.41 (0.15)	4.30 (0.13)
2	4.99 (0.13)	4.59 (0.15)	5.61 (0.12)	4.82 (0.14)	4.33 (0.18)	3.99 (0.17)	4.25 (0.11)
3	5.34 (0.12)	4.76 (0.14)	4.30 (0.12)	4.02 (0.12)	3.60 (0.17)	3.55 (0.18)	5.02 (0.12)
4	4.83 (0.13)	4.77 (0.15)	3.58 (0.14)	4.05 (0.17)	3.81 (0.18)	3.56 (0.19)	5.38 (0.12)

Figure 1. Mean Impression of Target Object (Experiment 1)

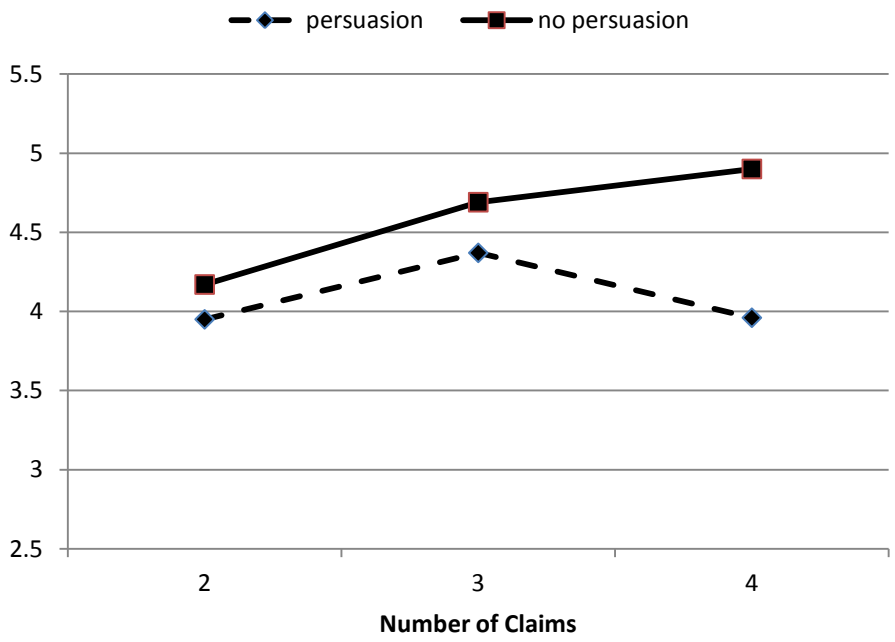


Figure 2. Means of Attitude, Impression, and Skepticism toward Objects (Experiment 2)

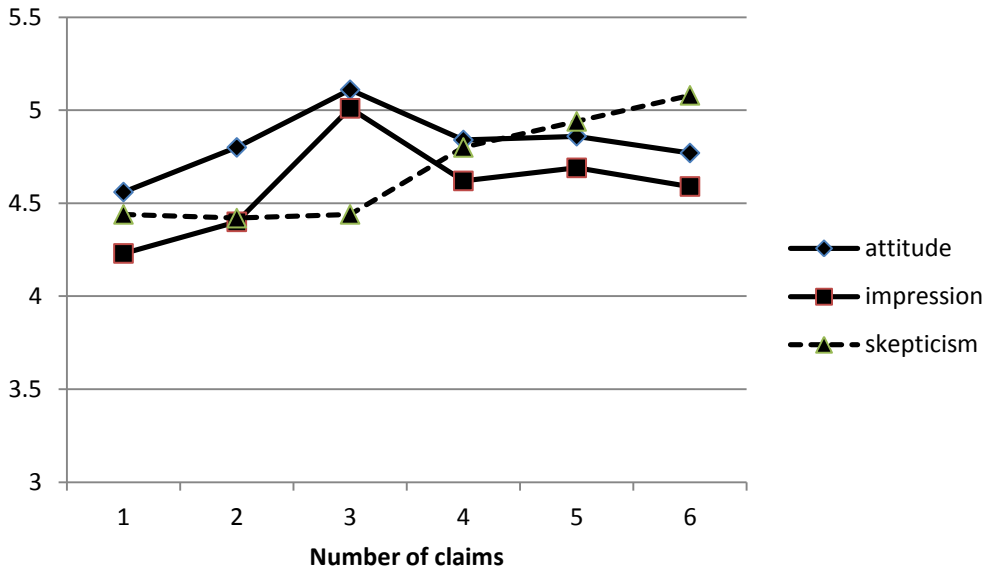


Figure 3. Means of Cereal Impression (Follow-up to Experiment 2)

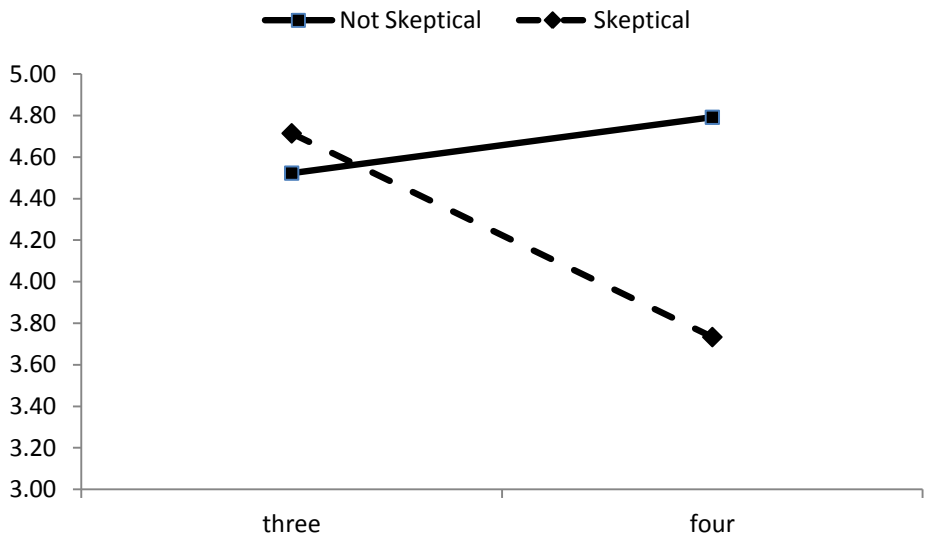


Figure 4. Fitted Means of Cereal Attitude (Experiment 3)

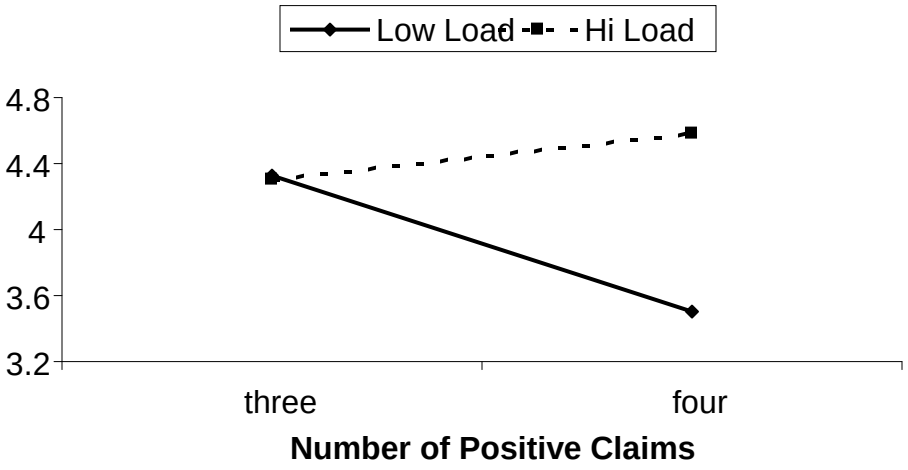
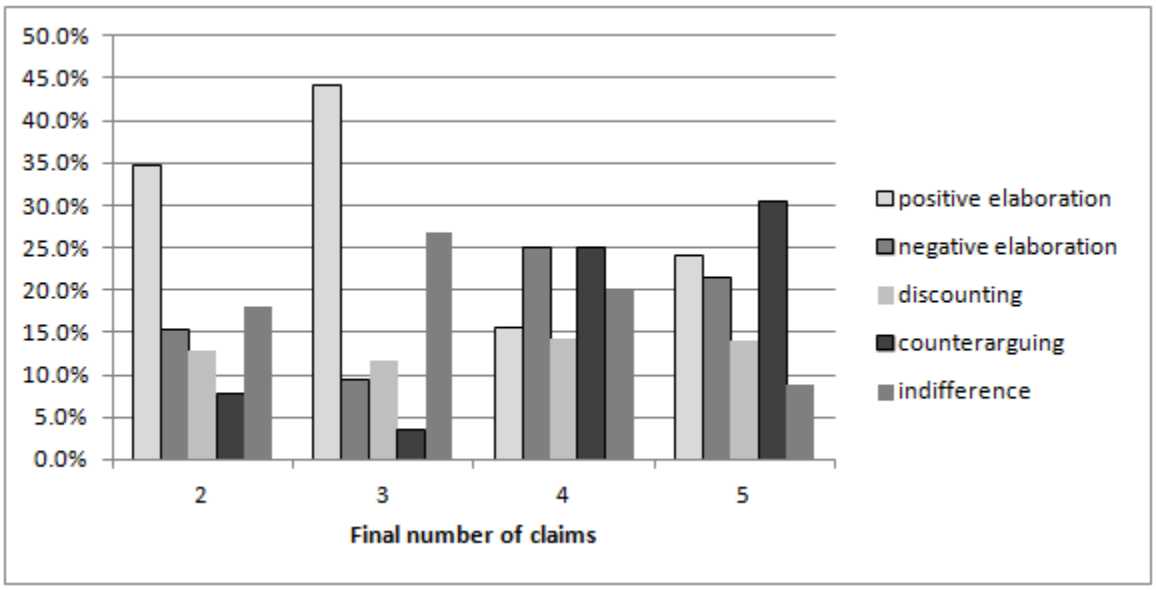


Figure 5. Percentage of claim-based thoughts of each type (Experiment 4)



Appendix: Scenarios for Experiments 1-4

All six claims used in the scenarios are displayed unless otherwise noted; smaller claim conditions used randomized and counterbalanced subsets of the full group of claims.

Cereal domain, persuasive source, Experiments 1, 2, 3, 4:
Imagine that you are shopping at the grocery store and you notice that a brand of cereal you sometimes buy has a new package design. As you look closer you discover that they have also changed the product itself. The packaging says that it is now:

> "**Healthier, better tasting, crunchier, sweeter, organic, and with higher quality ingredients**."

Cereal domain, non-persuasive source, Experiment 1 (max of four claims):
Imagine that you read a Consumer Reports article about a brand of cereal you sometimes buy. The article says that the brand of cereal has been changed and that it now is:

> "**Healthier, better tasting, crunchier, and with higher quality ingredients**."

Person domain, persuasive source, Experiment 1 (max of four claims):
Imagine that you've just run into an old friend from high school and you ask her how she's doing. She says that she's great and that she's just gotten back together with a previous boyfriend of hers named John. As she's describing her reasons for dating John again, she says,

> "**He's intelligent, kind, funny, and cute.**"

Person domain, non-persuasive source, Experiment 1 (max of four claims):
Imagine that you've just run into an old friend from high school and you ask her how she's doing. She says that she's great and that she's dating a guy named John. As she's describing her reasons for dating John, she says,

> "**He's intelligent, kind, funny, and cute.**"

Restaurant domain, Experiment 2:
Imagine that you are driving on the freeway and you see a billboard for a local restaurant. It's a restaurant you've heard of, and it's reasonably priced, so you've considered visiting it. The ad on the billboard says that their food is:

> "**Tastier, better priced, faster, healthier, larger entrees, and with better service than the competition**."

Shampoo domain, Experiment 2:
Imagine that you are reading one of your favorite magazines and an ad for a new brand of shampoo catches your attention. You decide to read the ad carefully to see if it is worth switching to this new product. The ad says that this new shampoo does the following:

"**Makes hair cleaner, stronger, healthier, softer, shinier, and fuller**."

Ice cream store domain, Experiment 2:
Imagine that you are walking through the neighborhood and notice that one of the local ice cream shops is now under new management. They have large signs out in front of the store to announce all of the changes they have made. The signs claim that the store now has:

"**Better seating, faster service, more flavors, lower prices, cleaner, and bigger servings than before.**"

Politician domain, Experiment 2:
Imagine that you are walking to some stores near campus and discover that a local politician who is running for re-election is hosting an event nearby. They are giving out free food, so you wander over to get some. While you're eating your meal you hear the politician tell the crowd:

"My honesty, integrity, experience, intelligence, interpersonal skills, and desire to serve make me the best candidate for the job."